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# ISTHE WORLD FACING STARVATION?



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The famine in the world is one of the worst in history.

True \_\_\_\_\_. False \_\_\_\_.

We have widespread malnutrition around the world, and some famine. Perhaps about 500 million people, 12 percent of the world's population, are malnourished. The Food and Agriculture Organization of the United Nations puts the figure at 460 million. Understandably, figures on this sort of thing are not very precise. Many of the less developed countries don't have good statistics on their population, let alone on their malnourished.

Any degree of famine is lamentable, especially in the modern world. However, in terms of actual famine, conditions now are mild compared with famines down through history. Several times catastrophic famines have wiped out 10 percent to 50 percent of entire populations of nations—most of the remaining people suffered from malnutrition.

Although historically the present famine is mild, the goal is to greatly reduce the number of malnourished—and the ideal is to eliminate hunger in the world.

#### 2. Malnutrition is a world-wide problem. True \_\_\_\_. False \_\_\_\_.

Malnutrition is largely the result of poverty, and partly the result of lack of education. Poverty and illiteracy are world-wide, thus making malnutrition a world-wide problem.

Between 20 and 30 percent of the people living in the Far East, Near East and Africa don't get enough food—compared with about 3 percent in developed countries.

Often it is the men—the breadwinners—in these poor families who get first priority on food. Perhaps half of the children in the less developed countries have inadequate nutrition.

Just as malnutrition is largely the result of poverty, nation-wide poverty is largely the result of low productivity. The key to better incomes, thus better nutrition, is to increase national productivity and to improve education.

3. Over the last 10 to 20 years, the amount of food per person has been declining steadily in the less developed countries of the world.

True \_\_\_\_\_. False \_\_\_\_\_.

Food output has been increasing, not decreasing. Food production has been increasing at a rate of about a half percent a person per year in less developed countries, and at about 1½ percent per person in the developed countries. Consequently, the nearly 4 billion people in the world today have about one-fifth more food per person to eat than the world's 2.7 billion people had 20 years ago.

Only twice in the last 20 years has world food production declined—in 1972 and 1974. Grain production declined about 35 million tons in 1972, went up 108 million tons in 1973 and then fell off by 65 million tons in 1974. That put the world in a squeeze, since we need 25 million tons more grain each year to keep up with the increase in population.

4. Total food production in less developed countries, where it is needed most, is falling far behind food output in developed countries. True \_\_\_\_. False \_\_\_\_.

Total food production has increased faster in the less developed countries than in the developed countries. Between 1954 and 1973, total food production in the less developed countries expanded 75 percent, compared with 65 percent in the developed countries.

Meantime, population in the less developed countries grew almost three times faster than in the developed countries. Consequently, food production per person in the less developed nations increased only moderately. Their food production per person climbed 8 percent in the last 20 years. Developed nations, with a slightly lower increase in total food production, but with a more moderate population growth rate, increased their food production 33 percent per person.

Over the last 20 years or so, the population growth rate in less developed countries has increased, going from 2 percent per year in 1950 to 2½ percent in recent years. The population growth rate in developed countries has declined to just under 1 percent per year.

## 5. The world is down to only about 30 days supply of food. True \_\_\_\_\_. False \_\_\_\_.

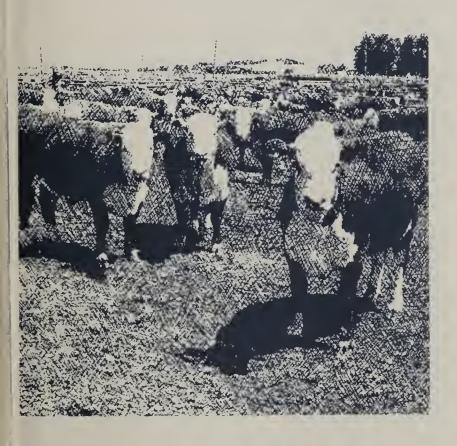
That would be catastrophic. We'd all be headed for starvation in a hurry.

The world has enough food supply to last from one harvest to another, plus a little extra.

We have a harvest every six months, anyway—one in the Northern Hemisphere and one in the Southern Hemisphere. The bigger by far is in the Northern Hemisphere.

In addition, we have extra food in the form of the livestock population. That's a big reserve in the United States and other developed countries. If we had to, we could eat into the basic livestock herd in an emergency. Russia has done it several times to meet grain shortages.

In most parts of the world, the food supply, even limited as it is in some places, is enough to last from one year to the next with a little extra.



6.	About 8 babies out of 10 in the world	are
born	in less developed countries.	
True	False	

That's right—86 percent of the increase in the world's population is coming in the less developed countries.

These countries now have 70 percent of the world's people—but have 80 percent of the births. The lowering death rate in less developed countries brings the increase in population growth up to 86 percent of the world's total.

# At the present rate, we will increase our world population by one-fourth in less than 10 years. True \_\_\_\_\_. False \_\_\_\_.

Amazingly, it's true that in less than 10 years we'll likely increase our population by one-fourth. We're adding more than 200,000 people a day to the world's population—and we'll likely add a billion more people in the next 10 years.

It took from the beginning of time until 1830 to reach 1 billion people in the world. It only took 100 years—to 1930—to add the second billion. It took just 30 years—to 1960—to add the third billion. Now in 1975, 15 years later, we have our fourth billion.

The mathematics of the situation is overwhelming. If you increase anything at the rate of 2 percent per year, you increase the original number 7 times in 100 years. At a 3-percent annual growth rate, you increase it 19 times.

The population growth rate is 3 percent or higher in many of the world's less developed nations.

8. The real solution to the long-run food problem is to increase food production in developed countries enough to take care of food deficiencies in the less developed nations. True \_\_\_\_\_. False \_\_\_\_\_.

The developed countries can help out, but the real answer lies in the less developed countries themselves. They have to greatly increase their food production, or cut their rate of population growth, or both, to avert disaster.

About 90 percent of the world's food is eaten in the countries where it is produced. The other 10 percent moves as food trade and aid—more than 95 percent as trade. This leaves only a small balance for those who need aid. The developed countries cannot possibly "feed the world."

Already, nearly 3 billion of the world's nearly 4 billion people live in the less developed nations. These countries also have a sizable amount of the world's farmable land. Actually, the less developed countries are only farming less than half (1.3 billion acres) of the 2.8 billion acres of farmable land available to them.



9. Almost all governments in less	
countries have policies designed to	produce
more food for their people.	
True False	

Strangely, they don't. Many follow a cheap food policy that discourages food production. Many countries manipulate markets so that prices received by their farmers are lower than they otherwise would be.

A number of the less developed countries overvalue their currencies so that imported food is artificially cheaper. This also lowers the price their own farmers get. Another practice is to impose embargoes, taxes, and quotas on exports—this keeps more food at home temporarily, but lowers internal farm prices. Several countries control the retail prices of basic foods, which also depresses farm prices.

These cheap food practices combine to lower the incentive for farmers to produce more food in less developed countries. If farmers' prices were higher, their earnings would permit larger investments in fertilizer, irrigation, machinery, and better quality seeds-all of which are needed to increase food production. Since farmers make up more than half the population of most less developed countries, an improvement in farm incomes would be widely distributed and benefit the entire economy.

10.	Food	grains	are	the	single	most	im-
portant	part	of the	worl	d's 1	food s	upply.	
True _	F	alse _					

Food grains—primarily wheat and riceaccount for 30 to 70 percent of the value of the food produced in all regions of the world. Food grains are the most important, and sometimes the only, food for many of the world's poorest people.

About one-half of the world's people live in predominantly rice producing and rice eating

sections of the world.

11. The strongest demand for food in the years ahead will continue to be for food grains such as wheat and rice, and not for meat.

True \_\_\_\_\_. False \_\_\_\_\_.

More than two out of three people in the world live in countries with annual incomes of \$200 per person or less. They can't afford to eat much more than grains such as wheat and rice, tubers and root crops.

It's not that they don't like meat and fruit.

As their individual incomes increase, they spend correspondingly more of the increase for meat and fruits than we do when our incomes

increase.

It's doubtful that people in less developed countries will be able to increase their incomes very much in the next several years—so the strongest world demand for food will continue to be for food grains.



12. If you ate a little less beef per week, that would free up some of the grain used to feed beef animals—and you would be making a real contribution toward helping the world's hungry.

True \_\_\_\_. False \_\_\_\_.

Lots of problems with that. First, not many people eat cattle feed—corn, barley, and grain sorghum. Second, the grain saved wouldn't necessarily get to hungry nations unless our Government bought it and shipped it there. Third, we eat all the beef that we raise—we don't store it or destroy it—so if you ate a little less beef, somebody else would eat more and cancel you out.

More important, cattle eat grass and other forages that man cannot eat. Cattle convert these forages to meat and milk that man can eat. About 70 percent of the beef comes from forages that otherwise would be wasted.

Ruminants—cattle, sheep, and goats—have provided an important part of man's food supply from the beginning of recorded history. They still do. The Food and Agriculture Organization is trying to control the tsetse fly in food-short Africa in order to increase cattle production there, not decrease it.

Our economic system automatically adjusts the use of feed grain. When feed grain prices are higher, farmers feed less to livestock—which is exactly what happened in 1974. When feed grain prices are low, farmers feed substantially more to livestock, thus raising per capita meat consumption—as occurred between 1950 and 1970 when beef consumption per person increased 80 percent in the United States.

13. The most needy of the world's people are rice eaters. If the United States produced twice as much rice and ate one-half less, that would solve the world's major food problem. True \_\_\_\_. False \_\_\_\_.

That won't do it. The United States has exported more rice than any other country. However, our total rice production is hardly a drop in the world food bucket. We grow around 9 billion pounds of rice—the world produces about 680 billion pounds. If we raised twice as much as normal and sent every bit of it to less developed countries, it would add less than half an ounce a day to their rice diets.

Again, the solution lies within the less developed countries, which produce 92 percent of the world's rice. If they can increase their yields of 1,340 pounds per acre substantially toward the 4,900-pound yields in the developed countries, that would be a tremendous step

forward.



14. It would be good policy to greatly increase the world food grain supply, especially of wheat, by raising wheat instead of corn on much of our Corn Belt land in the Midwest.

True \_\_\_\_. False \_\_\_\_.

To do that, we would have to change our way of life. We'd need to change our diets and pay more taxes.

It's true that we could grow tremendous amounts of wheat instead of the corn that is now grown in the Midwest to produce beef, pork, broilers, milk, and eggs. But first it would have to pay farmers on good Corn Belt land to grow wheat instead of corn. In order for that to happen, corn would have to get very cheap and wheat very expensive. That would come about only if we cut way back on meat, milk, and eggs—which is how we market our corn—and become a nation of cereal grain eaters.

Besides, if wheat were high priced enough to replace corn in the Corn Belt, the less developed countries couldn't buy the wheat anyway. If it got to them, our Government would have to buy it and ship it there. It just isn't in the cards from the standpoint of economics.



15. The answer then is to change our diets drastically from animal proteins to cereals, making much more food grain available to the less developed countries, and at a price that they might readily afford on the world market. True \_\_\_\_. False \_\_\_\_.

That would call for a revolutionary change in our diets and in our American agriculture. We would have to reduce our level of eating close to that of less developed countries in order to bring world food grain prices down to

a level they could readily afford.

What if we applied that practice to other shortages in the less developed countries? They are also short of fuel, medicines, clothing housing, roads, cars, schools, books, telephones, newspapers, television, and most of the other things that determine the level of living of a nation. It would make as much logic for us to go without these things to cheapen them so that the less developed countries could readily buy them. That would also take a widespread reduction in U.S, wage rates.

The answer to the problems of the less developed nations is not to lower our living standards to theirs, but to raise their levels. We can help with technological assistance and food aid.

16. Food prices around the world have been rising faster than the prices of all other commodities.

True \_\_\_\_. False \_\_\_\_.

It may seem that way. World food prices did climb sharply between 1971 and 1974—up 129 percent—but prices of many other commodities climbed more. Petroleum shot up 547 percent and fertilizers skyrocketed about 680 percent. Since petroleum and fertilizer are vital parts of the world's agricultural machine, their prices have a strong impact on food prices. These critical commodities were not alone in outpacing the food price rise. Rubber jumped 265 percent, zinc 197 percent, tin 153 percent, copper 147 percent, and lead 138 percent.

In short, prices of most basic commodities increased during the inflationary surge—many

of them more than food.

17. A major drop in food production caused the sharp rise in food prices since 1971.

True \_\_\_\_\_. False \_\_\_\_\_.

Surprisingly, the drop in food production was quite mild. Total world food production dropped only 1.0 percent in 1972, went up 5 percent in 1973, and then dropped 0.8 percent in 1974. Yet world food prices spurted up 44 percent in 1973, and more in 1974.

People tend to maintain their level of food intake. The affluent like to eat up to their accustomed level, the less affluent increase their food intake as incomes rise, and the poor struggle to keep from dropping below their limited level of food use. If the food supply falls even a little bit, people bid strongly against each other for the available supplies. Likewise, when food supplies are just a little over the usual level, farm prices drop sharply.

A good part of the increase in food prices in the 1971-74 period was the result of rising incomes and inflation around the world, which created unprecedented demand for food.



18. What the hungry world needs for the long haul is more food aid to prevent malnutrition.

True \_\_\_\_\_. False \_\_\_\_\_.

Food aid is a temporary help. What the world needs for the long haul is more food production, especially in the less developed countries.

The less developed countries need a long-term solution that can help boost food production. Since farmers will be the ones who do, or don't, produce more food, they need help with farm credit, management, education, research into new and better varieties, investment in new irrigation and land clearance. Most of all, the farmers in these countries need better prices that will permit them to make the new investments that are necessary to boost production.

Still, there will continue to be a demand for a strong flow of food exports from the United States to other parts of the world.



19. If we increased world cereal grain production by just 2 percent per year, most of the world's food problem would be solved.

True \_\_\_\_\_. False \_\_\_\_\_.

That's a good start, but it takes more. A 2-percent increase in cereal grains would provide an additional 500 calories daily needed by the world's half billion malnourished people. This would alleviate existing malnutrition. It is possible to increase world grain production by 2 percent. Unfortunately, we would still have the problems of population growth and the problem of getting the food to the people most in need. In the past, only a small share of food aid has gone directly to the malnourished —most of it has gone to reduce food prices and benefit urban consumers in the receiving countries.



20. An effective way to handle the shortages in world food supplies is to develop a system of world food reserves.

True \_\_\_\_\_. False \_\_\_\_\_.

If food is already short, you don't solve the problem by eating less in order to have more in a reserve. You have to increase production above current usage before you can build a reserve.

The only way to get the necessary production is to increase technology in less developed countries and increase the incentive for farmers to produce more.

The United States Government believes that food reserves should be handled by each nation, rather than to have a world-managed food reserve; and believes that the reserves in the United States should be owned by farmers and the private trade.

21. The Green Revolution, which was supposed to reshape agriculture in developing countries, has been a failure.

True \_\_\_\_\_. False \_\_\_\_\_.

Not really. People expected too much too soon from the Green Revolution. They expected miracle seeds, fertilizer, and irrigation to triple yields overnight and provide plenty of food for everyone in the developing countries. That hasn't happened. But, the Green Revolution has not failed.

The first high-yielding varieties of wheat and rice were distributed only a few years ago. It takes time for these new seeds and new farming practices to take hold—and it takes capital.

22. The United States has been providing more food assistance to developing countries than all the other developed countries combined.

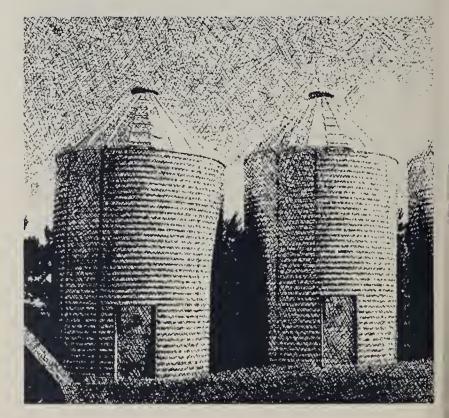
True \_\_\_\_. False \_\_\_\_

A lot more. From 1965 through 1973, the U.S. provided 80 percent of the world's food aid. The \$8.8 billion of food aid programs from the United States was 4 times greater than the \$2.2 billion of food aid contributed by all other developed countries. Canada was the second largest donor with a total of \$810 million, followed by Japan with \$303 million, and then West Germany with \$274 million.

In short, we account for 15 to 17 percent of the world's agricultural trade and 80 percent of the world's food aid.

Since the U.S. Food for Peace Program was adopted in 1954, we have provided \$25 billion in world food donations and concessional sales. Over the last 20 years, we have been shipping food aid wheat, rice, and other grains at the rate of 70 million pounds a day.

One of the reasons for the great interest in the world food situation is that the United States has run short of surplus food grains. When we run short, the source of most food aid dries up quickly.



### 23. The world is running out of land on which to raise food.

True \_\_\_\_. False \_\_\_\_.

We aren't running out of land—but we have already run out of land that can be brought into production easily. We use less than half the farmland in the world that is physically suitable for crop production. One recent study showed that 3.4 billion acres of land are actually being used for food production, while 7.8 billion acres in the world could be used to grow food crops and raise livestock.

Suitable land is not equally distributed among the world's less developed countries. Indonesia, the Philippines, and much of Africa and Latin America have much opportunity to expand agricultural land. India, Bangladesh, and Egypt, on the other hand, have very little expandable farmland and must concentrate on increasing crop yields.

The big problem is to scare up the capital needed to bring this extra land into production.



More fertilizer rather than more land may be the key to increased food production in the next 10 years.

True \_\_\_\_. False \_\_\_

It is cheaper and faster to use more fertilizer than to bring in new land. Besides, some countries don't have new land that realistically can be brought into production.

Fertilizer production prospects are on the upswing now. Low prices for fertilizer a few years ago slowed investment in new fertilizer plants. High fertilizer prices in 1973-75, which slowed food production increases in the less developed countries, have encouraged greater investments in new fertilizer plants.

The less developed countries will have to use more fertilizer-at least 15 million more tons per year by 1985. High petroleum prices have driven up the price of fertilizer. Oilproducing countries could lend a big hand to the hungry, less developed countries by (1) making fertilizer from their gas, or (2) by offering energy to food-deficit countries at lower prices, or (3) by providing substantial financial aid from their large trade reserves that have arisen from the pricing policies on petroleum.



25. With today's sophisticated information systems, we have a good idea of how much food the world will have from year to year.

True \_\_\_\_\_. False \_\_\_\_\_.

Unfortunately, most less developed countries have rather ineffective systems for monitoring food production and keeping track of food stocks. This includes big food-producing countries such as Russia, the Peoples' Republic of China, India, Bangladesh, and Brazil.

Some countries even hold their limited information close to their chests and do not

openly share it with the world.

As a result, it is almost impossible to forecast with any certainty the prospects for food production and anticipate the real needs from year to year.

Besides, weather is the major factor in determining yearly variations in food supplies. Unfortunately, we cannot predict weather well enough to forecast crop yields very effectively. Our insight into the future is tied to what was "normal" in the past.

26. Scientists generally agree that the world's climate is cooling down, and that this could be disastrous to agriculture and to mankind.

True \_\_\_\_. False \_\_\_\_.

Some say this, but there simply aren't enough data for long-range climate predictions. We are having some weather-climate abnormalities, but these might very well be no more than "normal" variations. It will take years of scientific observations before anyone can be reasonably sure, one way or the other.

Nevertheless, world food production policies should take into account that weather conditions can and do change rapidly from year to year. We need a margin of security against

sudden changes.

27. If world population keeps growing at the current rate, and if the world keeps producing and eating food at the current rate, there will be a very serious food shortage in 10 years. True \_\_\_\_\_. False \_\_\_\_\_.

Not necessarily. The world can produce enough grain to provide largely cereal diets for the expected population in the less developed world—if there are strong enough incentives for the farmers who produce the food. Some experts predict that per capita consumption in less developed countries will be 4 percent greater, or more, in 1985 than in 1970. Much depends on what the less developed countries do about increasing their food output, and slowing their population growth.

We have the ability to produce much more food in the world, but doing so in a substantial way will take more of our incomes and resources. That would not be a major burden in the United States where we spend less than 20 percent of our disposable income for food, although it would not be popular—witness the complaints when higher food prices moved food costs from 15.9 percent of our disposable incomes in 1973 to 16.8 percent in 1974.

In less developed countries, where people are already hungry, putting more national resources into food production would pay off better than many alternative uses of resources.



28. We're past the worst of our food problem. We now have the technology to increase food production enough to meet the foreseeable situation.

True \_\_\_\_. False \_\_\_\_.

It has taken us from the beginning of time to increase our "know-how" enough to produce the food for 4 billion people—and about one-half billion of those are malnourished. Yet, at the current rate of population increase, we could have another 4 billion people to feed shortly after the year 2000.

This calls for us to somehow increase our "know-how" enough in just 25 years or so to be able to feed this second 4 billion people. Either that, or cut down on the rate of popula-

tion growth.

The technology to produce enough food for 4 billion more people in 25 or 30 years with present diets is not on the books. We may make scientific "breakthroughs"—but if we don't, the darkest days are ahead.

In the judgment of the Office of Communication, these are the correct answers to each question.

1—False	15—False
2—True	16—False
3—False	17—False
4—False	18—False
5—False	19—False
6—True	20—False
7—True	21—False
8—False	22—True
9—False	23—False
10—True	24—True
11—True	25—False
12—False	26—False
13—False	27—False
14—False	28—False